

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/017325

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl⁷ G11B17/028

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
Int.Cl⁷ G11B17/022-17/035

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Toroku Koho 1996-2005
 Kokai Jitsuyo Shinan Koho 1971-2005 Toroku Jitsuyo Shinan Koho 1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 11-306628 A (Sony Corp.), 05 November, 1999 (05.11.99),	1, 3
Y	Par. Nos. [0032] to [0044]; Figs. 4 to 12 (Family: none)	16
A	JP 2003-16710 A (Matsushita Electric Industrial Co., Ltd.), 17 January, 2003 (17.01.03), Par. Nos. [0001], [0044] to [0046]; Fig. 5 & US 2002/0159373 A1	2, 4, 5, 6, 8-10
Y	JP 2000-67497 A (Sankyo Seiki Mfg. Co., Ltd.), 03 March, 2000 (03.03.00), Par. No. [0017]; Fig. 1 (Family: none)	16
A	JP 2000-67497 A (Sankyo Seiki Mfg. Co., Ltd.), 03 March, 2000 (03.03.00), Par. No. [0017]; Fig. 1 (Family: none)	9

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
22 February, 2005 (22.02.05)

Date of mailing of the international search report
08 March, 2005 (08.03.05)

Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Faxsimile No.

Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/017325

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.: 7, 11-15
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

See extra sheet 1.

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

See extra sheet 2.

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
 No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/017325

Continuation of Box No.II-2 of continuation of first sheet(2)

1. Claim 7 relates to the portion of the international application which does not fulfill specified requirements to such a degree that a significant international search can be performed. Namely, the constitution described in Claim 7 "the upward guide surfaces formed at the tips of the claw bodies and the downward receiving surface of the hub body formed at a position opposite to the upward guide surfaces and formed so that the tip sides thereof are tilted downward" is not inadequately disclosed in the meaning of PCT Article 5 since its specific constitution is not described in the specification. Also, it is inadequately supported by the disclosure of the specification in the meaning of PCT Article 6. In addition, it is inadequately supported by the requirements of clarity in PCT Article 6 even if common general technical knowledge in the application is taken into account.

2. Claims 11-15 relate to the portion of the international application which does not fulfill specified requirements to such a degree that a significant international search can be performed. Namely, the constitution described in Claims 11-15 "the upward guide on the inner side" is not inadequately disclosed in the meaning of PCT Article 5 since its specific constitution is not described in the specification. Also, it is inadequately supported by the disclosure of the specification in the meaning of PCT Article 6. In addition, it is inadequately supported by the requirements of clarity in PCT Article 6 even if common general technical knowledge in the application is taken into account.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/017325

Continuation of Box No.III of continuation of first sheet(2)

A common matter pertaining to the inventions in Claims 1-16 is the constitution of Claim 1.

The result of search reveals that the common matter is not novel since it is disclosed in Document: JP 11-306628 A (Sony Corp.), 05 November, 1999 (05.11.99), paragraphs [0032]-[0044].

Since the common matter makes no contribution over the prior art, it is not a special technical feature in the meaning of the second sentence of PCT Rule 13.2.

(A) Claims 2, 4, and 5 and Claim 16 dependent upon Claims 2, 4, and 5 have a same special technical feature that "the claw parts in a standby state are positioned lower than the claw parts in a recording/regenerative state".

(B) Claims 6, 7, 9, and 10 and Claim 16 dependent upon Claims 6, 7, 9, and 10 have a same special technical feature that "when the disk is thin in the recording/regenerative state, as compared with a case in which the disk is thick, the claw parts are moved more outward and the position of the claw parts is more lowered".

(C) Claim 8 and Claim 16 dependent upon Claim 8 have a same special technical feature that "the claw side stoppers are installed at the more forward side than the contact parts of the lower end parts of the claw bodies with a lower part in a standby state, and the hub side stopper in contact with the claw side stoppers is formed so that the lower side thereof is tilted toward the tip side".

(D) Claims 11-15 and Claim 16 dependent upon Claims 11-15 have a same special technical feature that "when the claw parts are pressed from the upper side, the inward side upward guides are gradually increased in height toward the inner side and the claw parts are moved inward".

(E) Claim 16 has a special technical feature such that "the traverse is moved close to and apart from the base body".

Also, the special technical features in items (A) to (E) above do not correspond to each other.

As a result, this international application involves five inventions not fulfilling the requirement of unity of invention as follows.

(1) Claims 1, 2, 4, and 5, and Claim 16 dependent upon Claims 1, 2, 4, and 5

(2) Claims 6, 7, 9, and 10, and Claim 16 dependent upon Claims 6, 7, 9, and 10

(3) Claim 8, and Claim 16 dependent upon Claim 8

(4) Claims 11-15, and Claim 16 dependent upon Claims 11-15

(5) Claim 16